

WHAT IS CLAIMED IS:

1. A data processing method comprising the steps of:
inputting context description data described in a
hierarchical structure,

5 wherein the hierarchical structure comprises:

the highest hierarchical layer in which time-varying media
content and the context of the media content are formed into
a single element representing media content;

10 the lowest hierarchical layer in which an element represents
a media segment formed by dividing the media content and is
assigned, as an attribute, time information relating to a
corresponding media segment and a score; and

15 other hierarchical layers include elements which are
directly or indirectly associated with at least one of the media
segments and which represent scenes or a set of scenes; and

selecting at least one segment from the media content, on
the basis of the score assigned to the context description data.

20 2. The data processing method according to claim 1,
further comprising an extraction step for extracting only data
corresponding to the segment selected by the selection means,
from the media content.

25 3. The data processing method according to claim 1,
further comprising a playback step for playing back only data

corresponding to the segment selected by the selection means,
from the media content.

4. The data processing method according to claim 1,
5 wherein the score represents a contextual importance of media
content.

5. The data processing method according to claim 1,
wherein the score represents the degree of contextual importance
10 of a scene of interest from the viewpoint of a keyword, and in
the selection step there is selected a scene in which the score
is used from at least one viewpoint.

6. The data processing method according to claim 1,
15 wherein the media content corresponds to video data or audio
data.

7. The data processing method according to claim 1,
wherein the media content corresponds to data comprising video
20 data and audio data, which are mutually synchronized.

8. The data processing method according to claim 6,
wherein the context description data describe the configuration
of video data or audio data.

9. The data processing method according to claim 7,
wherein the context description data describe the configuration
of each of video data sets and audio data sets.

5 10. The data processing method according to claim 8,
wherein, in the selection step, a scene is selected by reference
to context description data pertaining to video data or audio
data.

10 11. The data processing method according to claim 8,
wherein the selection step comprises a video selection step for
selecting a scene of video data by reference to context
description data of video data or an audio selection step for
selecting a scene of audio data by reference to context
15 description data of audio data.

12. The data processing method according to claim 9,
wherein the selection means comprises a video selection step
for selecting a scene of video data by reference to context
20 description data of video data, and an audio selection step for
selecting a scene of audio data by reference to context
description data of audio data.

13. The data processing method according to claim 2,
25 wherein the data to be extracted in the extraction step correspond

to video data or audio data.

14. The data processing method according to claim 2,
wherein the data to be extracted in the extraction step correspond
5 to data comprising video data and audio data, which are mutually
synchronized.

15. The data processing method according to claim 1,
wherein media content comprises a plurality of different media
10 data sets within a single period of time; and the data processing
method further comprises a determination step of receiving
structure description data having a data configuration of the
media content described therein and determining which one of
the media data sets is to be taken as an object of selection,
15 on the basis of determination conditions to be used for
determining data as an object of selection; and, in the selection
step, data are selected from only the data sets, which have been
determined as objects of selection by the determination means,
by reference to the structure description data.

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16. The data processing method according to claim 1,
further comprising:

a determination for receiving structure description data
having a data configuration of the media content described
25 therein and determines whether only video data, only audio data,

or both video data and audio data are taken as an object of selection, on the basis of determination conditions to be used for determining data as an object of selection; and wherein
in the selection step, data are selected from only the data
5 sets determined as objects of selection by the determination means, by reference to the structure description data.

17. The data processing device according to claim 16,
wherein media content comprises a plurality of different media
10 data sets within a single period of time;

in the determination step, there are received structure description data having a data configuration of the media content described therein, and a determination is made as to which one of the video data sets and/or audio data sets is to be taken
15 as an object of selection; and

in the selection means, data are selected from only the data sets determined as objects of selection by the determination means, by reference to the structure description data.

20 18. The data processing method according to claim 1,
wherein representative data pertaining to a corresponding media segment are added, as an attribute, to individual elements of context description data in the lowest hierarchical layer; and
in the selection step, there are selected the entire data
25 pertaining to the media segment and/or representative data

pertaining to a corresponding media segment.

19. The data processing method according to claim 18,
wherein the entire data pertaining to the media segment
5 correspond to media data, and the media content comprises a
plurality of different media data sets within a single period
of time; and

the data processing method further comprises a
determination step for receiving structure description data
10 having a data configuration of the media content described
therein and determining which one of the media data sets and/or
representative data sets is to be taken as an object of selection;
and

in the selection means, data are selected from only the
15 data sets determined as objects of selection by the determination
means, by reference to the structure description data.

20. The data processing method according to claim 18,
further comprising:

20 a determination step for receiving structure description
data having a data configuration of the media content described
therein and determining whether only the entire data pertaining
to the media segment, only the representative data pertaining
to the media segment, or both the entire data and the
25 representative data pertaining to a corresponding media segment

are taken as objects of selection, on the basis of determination conditions to be used for determining data as an object of selection; and wherein

in the selection step, data are selected from only the data sets determined as objects of selection by the determination means, by reference to the structure description data.

21. The data processing method according to claim 15, wherein the determination conditions comprise at least one of the capability of a receiving terminal, the traffic volume of a delivery line, a user request, and a user's taste, or a combination thereof.

22. The data processing method according to claim 2, further comprising a formation step for forming a stream of media content from the data extracted by the extraction means.

23. The data processing method according to claim 22, further comprising a delivery step for delivering the stream formed by the formation means over a line.

24. The data processing method according to claim 22, further comprising a recording step for recording the stream formed by the formation means on a data recording medium.

25. The data processing method according to claim 24,
further comprising a data recording medium management step for
re-organizing the media content that has already been stored
and/or media content to be newly stored, according to the
5 available disk space of the data recording medium.

26. The data processing method according to claim 24,
further comprising a stored content management step for
re-organizing the media content stored in the data recording
10 medium according to the period of storage of the media content.

27. A computer-readable recording medium on which the data
processing method according to any one of claims 1 through 26
is recorded in the form of a program to be performed by a computer.
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28. A program for causing a computer to perform the data
processing method according to any one of claims 1 through 26.